08090 6580660

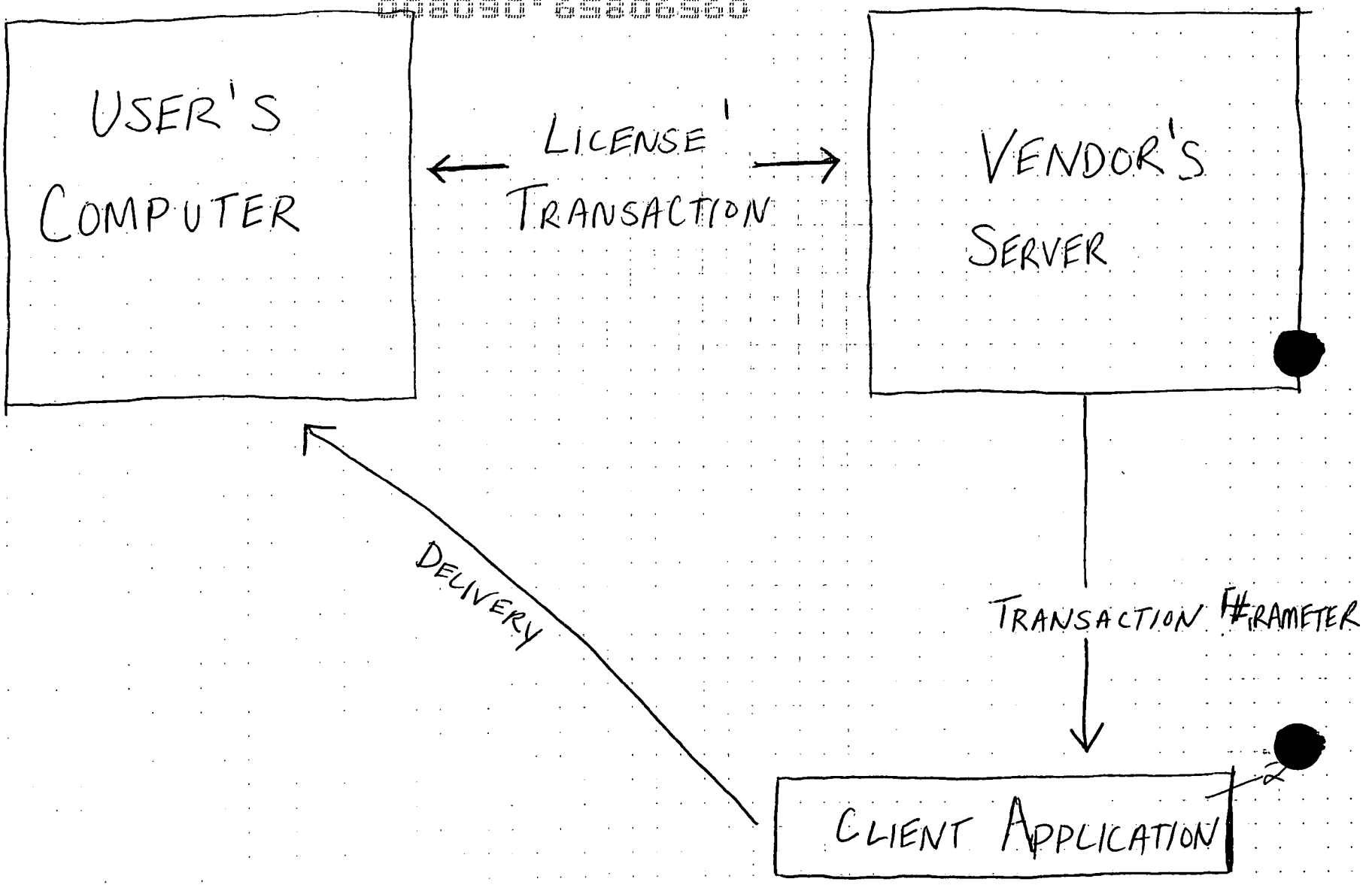


Fig. 1

0068090 "69806560

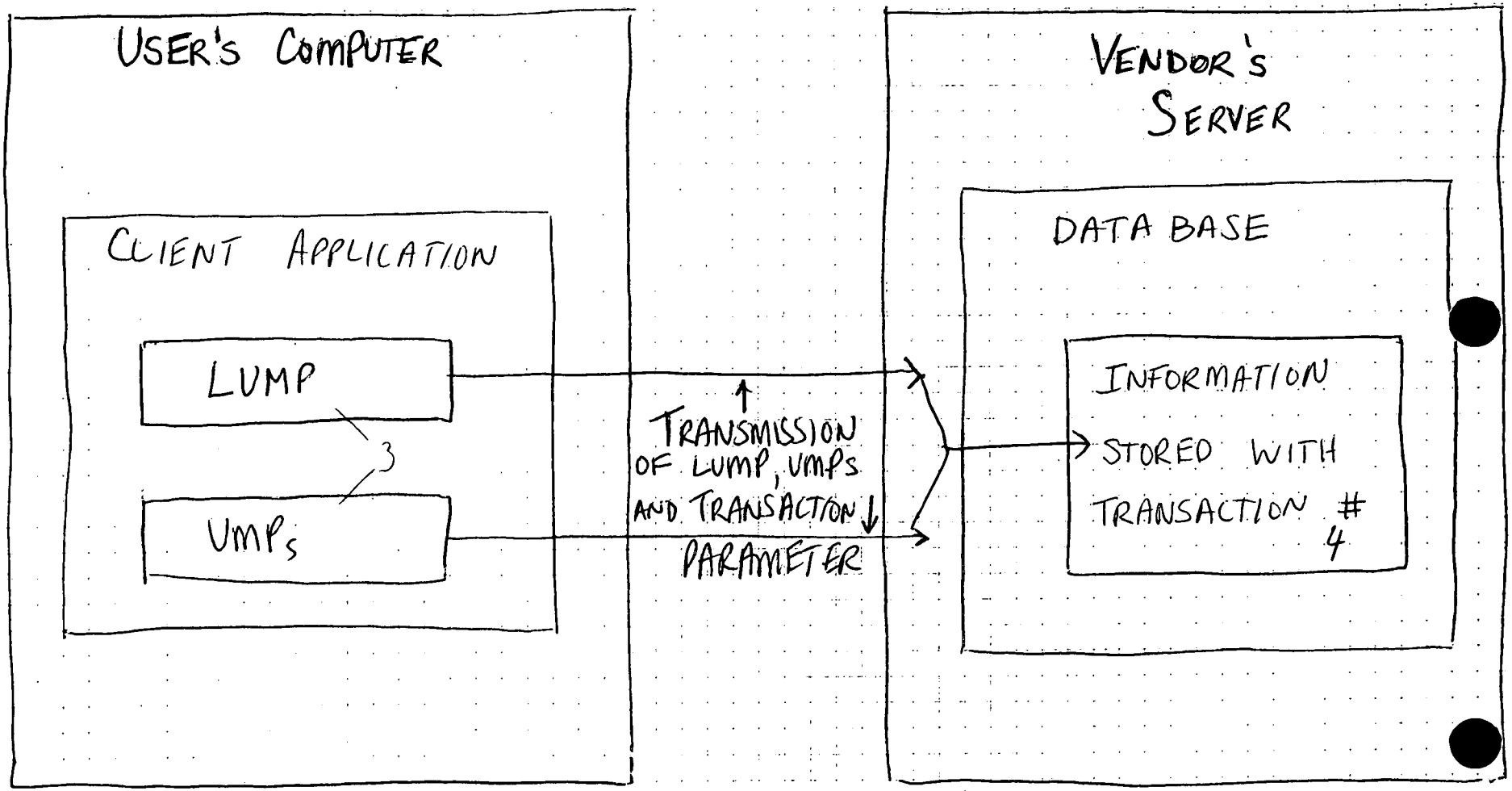


Fig. 2

08090 65806560

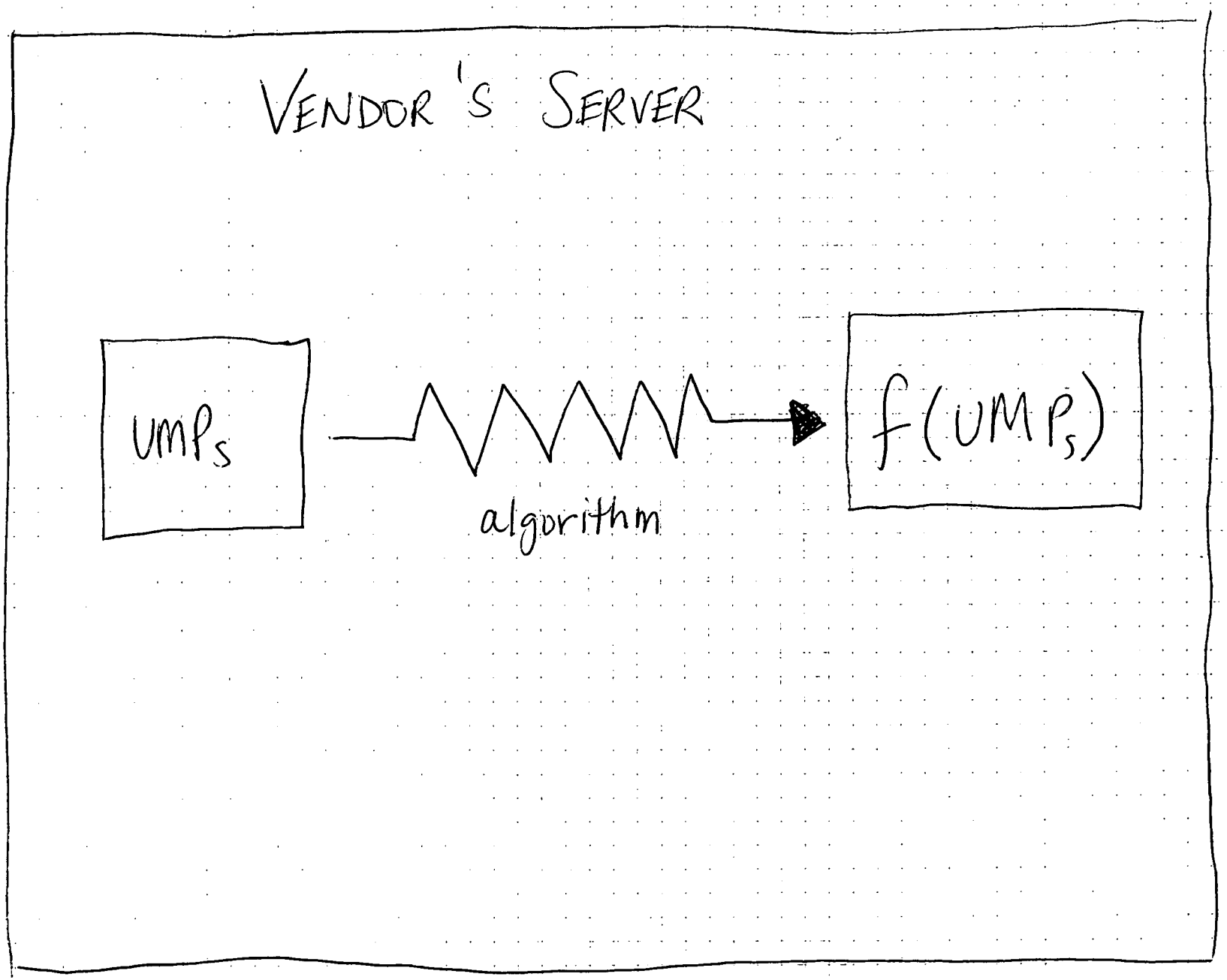


Fig. 3

VENDOR'S SERVER

~~DATABASE~~

FOR $UMP_1, \ldots UMP_j, \ldots UMP_N$ (ALL UMPs GENERATED)

$f(UMP_s)_j$ —ENCRYPTION→ $\mathcal{E} f(UMP_s)_j$

UMP_j is Key

THE ~~LIST~~ OF N ENCRYPTED $f(UMP_s)$ IS DENOTED AS:

$$\sum_{i}^{N} \mathcal{E} f(UMP_s)_i$$

Fig. 4

0080900 6580660

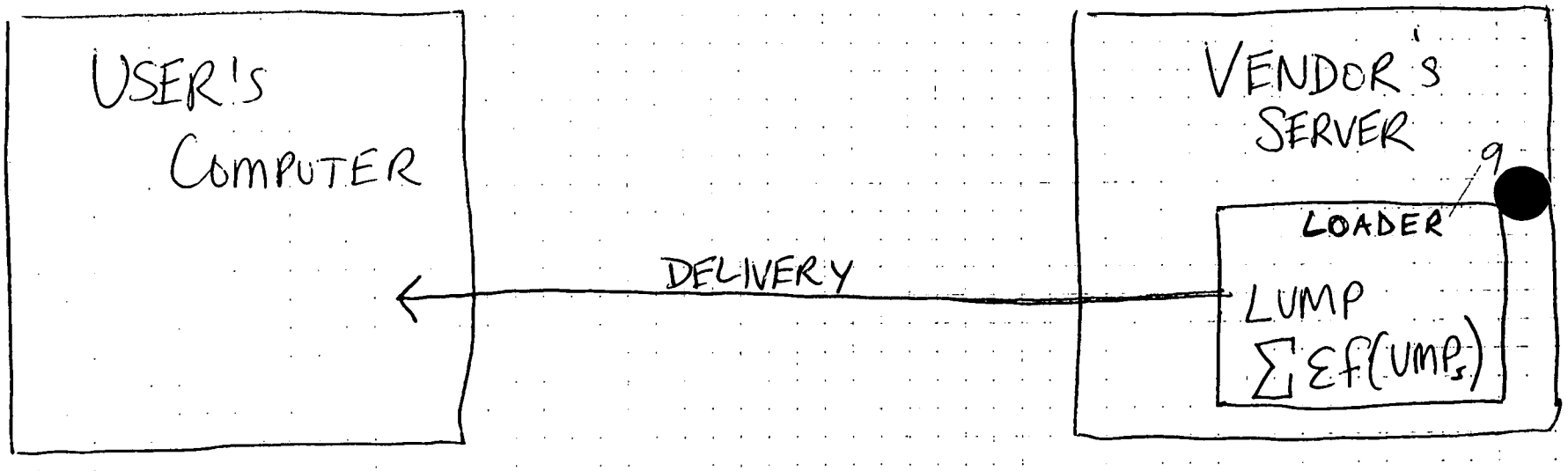


Fig. 5

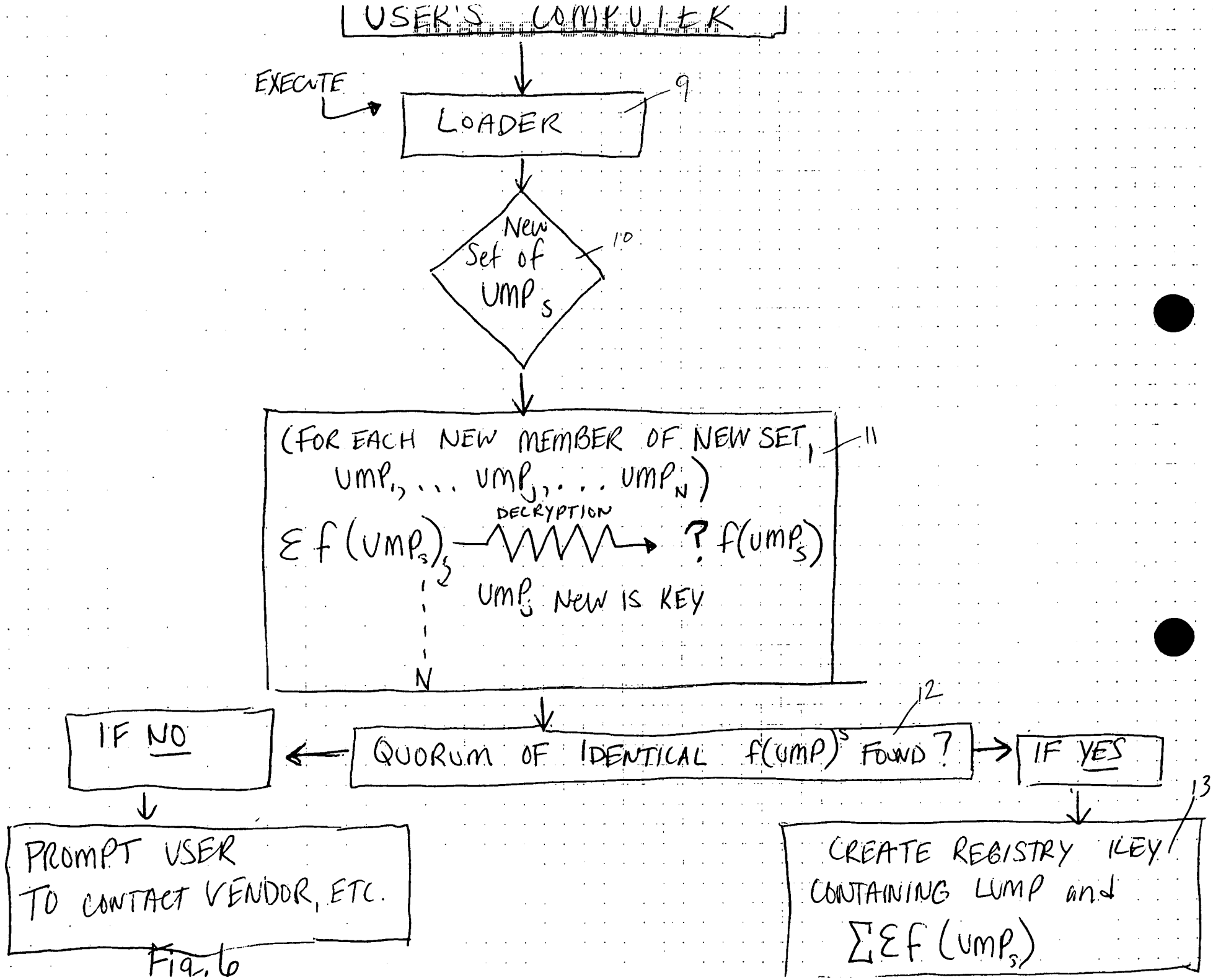

USER'S COMPUTER
EXECUTE
LOADER
9
New Set of UMP's
10
(FOR EACH NEW MEMBER OF NEW SET, UMP1, ... UMPJ, ... UMPN)
11
DECRYPTION
Σf(UMPS)J
? f(UMPS)
UMPJ NEW IS KEY
N
QUORUM OF IDENTICAL f(UMP)S FOUND ?
12
IF NO
IF YES
PROMPT USER TO CONTACT VENDOR, ETC.
CREATE REGISTRY KEY CONTAINING LUMP and ΣΣf(UMPS)
13

Fig. 6

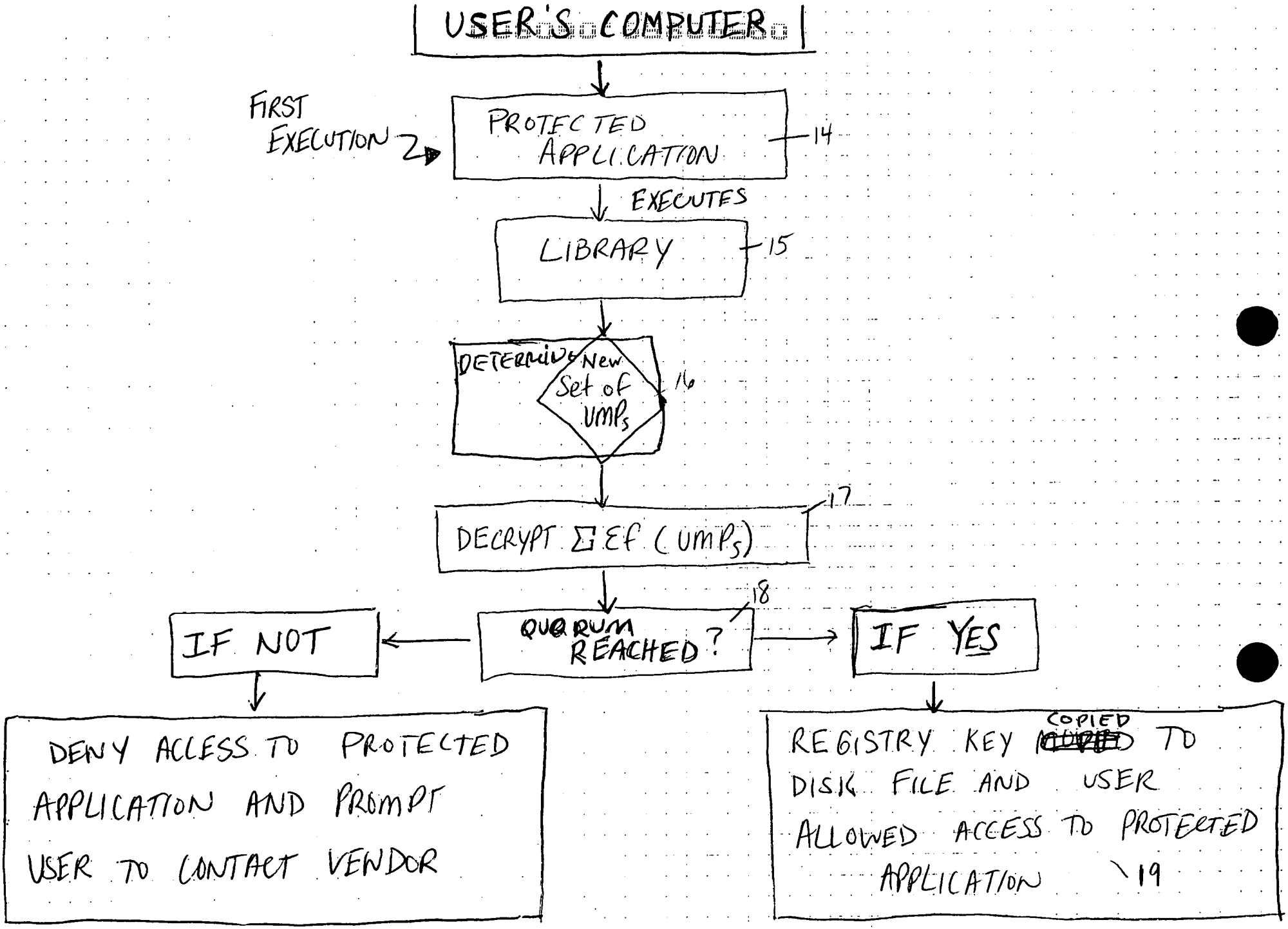
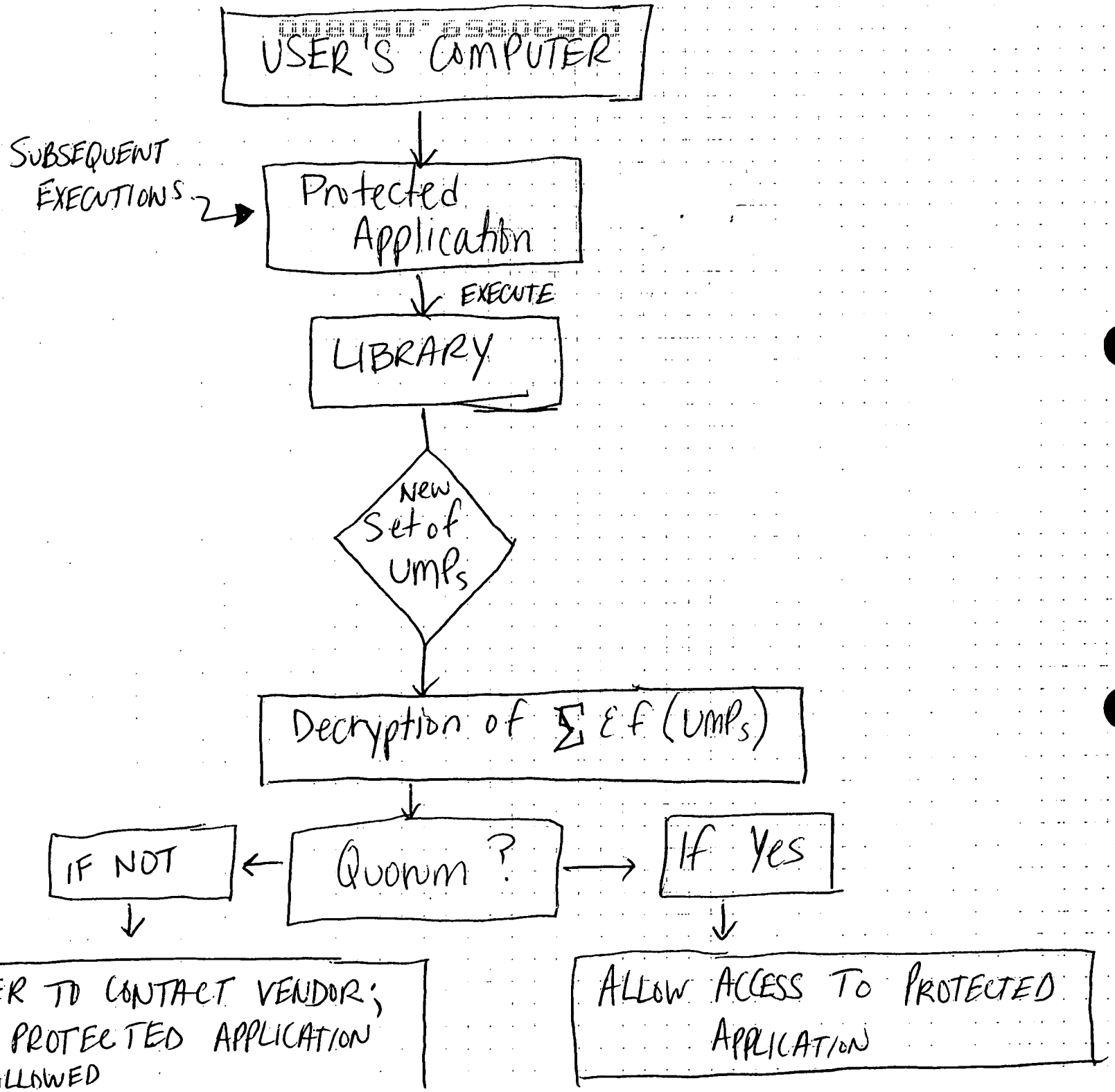

USER'S COMPUTER
FIRST EXECUTION
PROTECTED APPLICATION
14
EXECUTES
LIBRARY
15
DETERMINE New Set of UMPs
16
DECRYPT Σ Ef (UMPs)
17
QUORUM REACHED?
18
IF NOT
IF YES
DENY ACCESS TO PROTECTED APPLICATION AND PROMPT USER TO CONTACT VENDOR
REGISTRY KEY COPIED TO DISK FILE AND USER ALLOWED ACCESS TO PROTECTED APPLICATION
19

Fig. 7


USER'S COMPUTER
SUBSEQUENT EXECUTIONS
Protected Application
EXECUTE
LIBRARY
New Set of UMPs
Decryption of Σ Ef (UMPs)
Quorum ?
IF NOT
If Yes
PROMPT USER TO CONTACT VENDOR; ACCESS TO PROTECTED APPLICATION IS NOT ALLOWED
ALLOW ACCESS TO PROTECTED APPLICATION

Fig

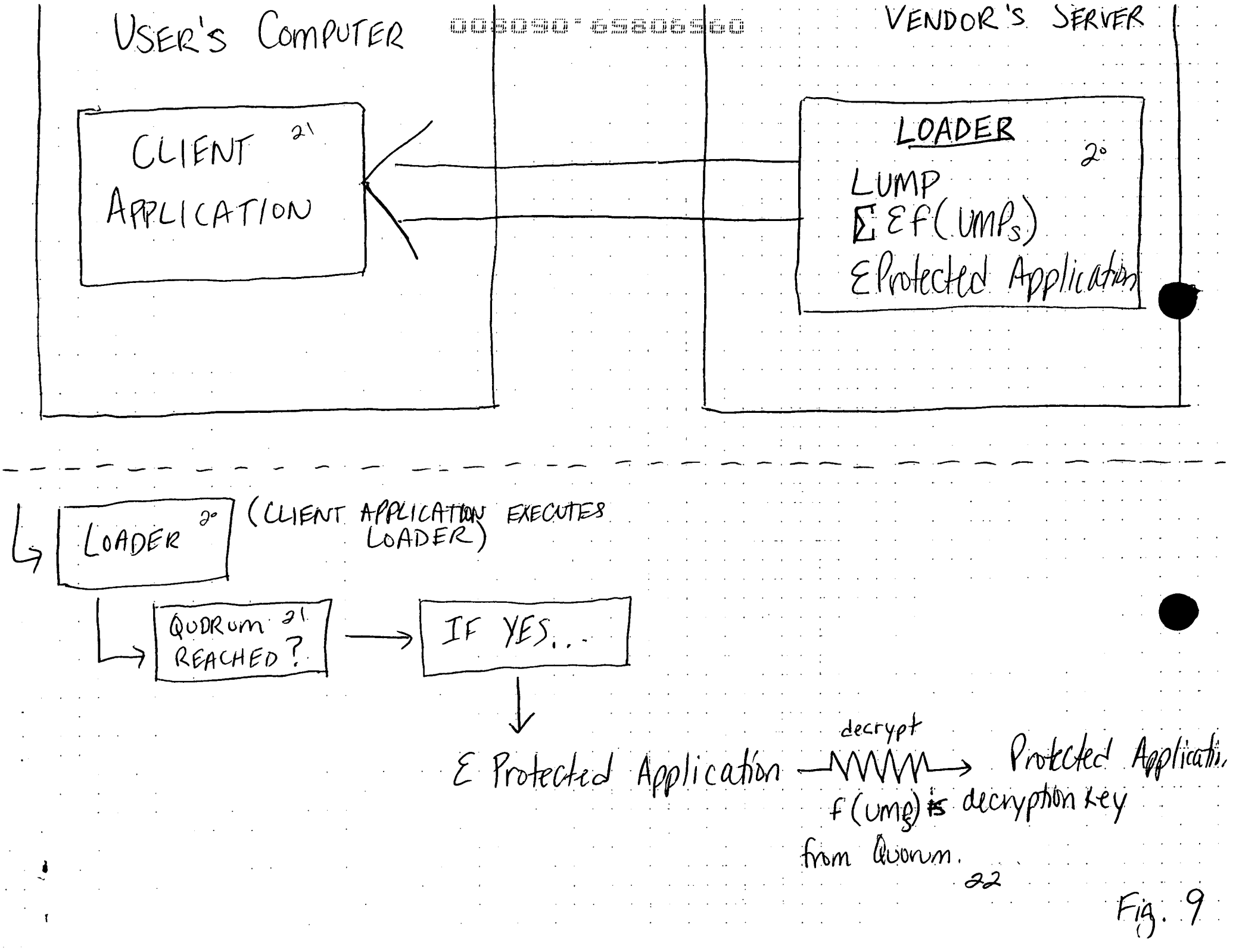

USER'S COMPUTER
VENDOR'S SERVER
CLIENT APPLICATION 21
LOADER 20
LUMP
Σ Ef(UMPs)
E Protected Application
LOADER 20
(CLIENT APPLICATION EXECUTES LOADER)
QUORUM 21 REACHED?
IF YES...
E Protected Application
decrypt
Protected Applicati.
f(UMs) is decryption key from Quorum. 22

Fig. 9